

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

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1. - 53. (Cancelled)

54. (New) A TV observation system for an endoscope, comprising:
an endoscope;
a TV camera; and
a light source,

71
wherein the endoscope has an insertion part having a thin and long shape, a holding part continuously extending from a proximal end of the insertion part, an eyepiece section formed on the holding part, a light guide that introduces illumination to a distal end of the insertion part, a light source connecting section formed on the holding part to achieve removable connection of the light source,

wherein the TV camera has an image pickup element and said TV camera is connected to the eyepiece section of the endoscope, and

wherein the light source comprises a plurality of LEDs, said light source is removably connected to the light source connecting section, and the light source supplies illumination light to the light guide of the endoscope.

55. (New) A TV observation system for an endoscope according to claim 54, wherein the light source further comprises an optical element that compounds light emitted from the plurality of LEDs.

56. (New) A TV observation system for an endoscope according to claim 54, wherein the TV camera further comprises a battery that supplies an electric current to the light source.

57. (New) A TV observation system for an endoscope according to claim 54, wherein the light source further comprises a control mechanism that controls electric currents

applied to the plurality of LEDs, so that amounts of light emission of the LEDs are set in a desired ratio.

58. (New) A TV observation system for an endoscope according to claim 54, wherein the light source is configured to sequentially emit a light of at least three colors, and comprises a LED that emits red light, a LED that emits green light, and a LED that emits blue light.

59. (New) A TV observation system for an endoscope according to claim 55, wherein the optical element is a prism that has a cubic shape made of two right-angled prisms cemented together at fitting surfaces, and the fitting surfaces are processed with a bandpass coating, which has a characteristic to transmit rays with predetermined wavelengths and to reflect remaining rays.

60. (New) A TV observation system for an endoscope according to claim 55, wherein the optical element is a planar-plate optical member having a fine pattern of grooves engraved on a surface thereof, and compounds light emitted from the plurality of LEDs using a diffraction effect.

61. (New) A TV observation system for an endoscope, comprising:
an endoscope;
a TV camera; and
a light source,

wherein the endoscope has an insertion part having a thin and long shape, a holding part continuously extending from a proximal end of the insertion part, an eyepiece section formed on the holding part, a light guide that introduces illumination light to a distal end of the insertion part, a light source connecting section formed on the holding part to achieve removable connection of the light source,

wherein the TV camera has an image pickup element and said TV camera is connected to the eyepiece section of the endoscope, and

wherein the light source comprises a plurality of LEDs, and said light source is integrally constructed with the TV camera.

62. (New) A TV observation system for an endoscope according to claim 61, wherein the TV camera further comprises a battery that supplies an electric current to the light source.

63. (New) A TV observation system for an endoscope according to claim 61, wherein the light source further comprises a control mechanism that controls electric currents applied to the plurality of LEDs, so that amounts of light emission of the LEDs are set in a desired ratio.

7 1
64. (New) A TV observation system for an endoscope according to claim 61, wherein the light source is configured to sequentially emit light of at least three colors, and comprises a LED that emits red light, a LED that emits green light, and a LED that emits blue light.

65. (New) A TV observation system for an endoscope according to claim 61, further comprising an optical element that compounds light emitted from the plurality of LEDs.

66. (New) A TV observation system for an endoscope according to claim 65, wherein the optical element is a prism that has a cubic shape made of two right-angled prisms cemented together at fitting surfaces, and the fitting surfaces are processed with a bandpass coating, which has a characteristic to transmit rays with predetermined wavelengths and to reflect remaining rays.

67. (New) A TV observation system for an endoscope according to claim 65, wherein the optical element is a planar-plate optical member having a fine pattern of grooves engraved on a surface thereof, and compounds light emitted from the plurality of LEDs using a diffraction effect.

68. (New) A light source mounted on an endoscope that comprises an insertion part having a thin and long shape, a holding part continuously extending from a proximal end of the insertion part, an eyepiece section formed on the holding part, a light guide that

introduces illumination light to a distal end of the insertion part, a light source connecting section formed on the holding part to achieve removable connection of the light source, the light source comprising a plurality of LEDs and supplies illumination light to the light guide of the endoscope.

69. (New) A light source according to claim 68, further comprising an optical element that compounds light emitted from the plurality of LEDs.

70. (New) A light source according to claim 68, further comprising a control mechanism that controls electric current applied to the plurality of LEDs, so that amounts of light emission of the LEDs are set in a desired ratio.

71. (New) A light source according to claim 69, wherein the optical element is a prism that has a cubic shape made of two right angled prisms cemented together at fitting surfaces, and the fitting surfaces are processed with a bandpass coating, which has a characteristic to transmit rays with predetermined wavelengths and to reflect remaining rays.

72. (New) A light source according to claim 69, wherein the optical element is a planar-plate optical member having a fine pattern of grooves engraved on a surface thereof, and compounds light emitted from the plurality of LEDs using a diffraction effect.